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IS 5190:1993

भारतीय मानक

पीपों में नेचुरल रबड़ लेटेक्स की पैकेजिंग का कोड

(पहला पुनरीक्षण)

Indian Standard

CODE OF PACKAGING OF NATURAL RUBBER LATEX IN DRUMS

(First Revision)

UDC 678-4:031:621:798:006:76

@ BIS 1993

BUREAU OF INDIAN STANDARDS MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG NEW DELHI 110002

May 1993 Price Group 1

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Rubber Sectional Committee had been approved by the Petroleum, Coal and Related Products Division Council

Preserved latex is susceptible to decomposition due to contamination, evaporation or loss of preservatives. It should, therefore, be packed in clean, air-tight and corrosion resistant strong containers.

At present, containers of varying material and sizes, which have been previously in use for storage of different materials are used and so cleaning and inside coating for these containers vary from container to container. Attempts have been made in this standard to lay down a code for proper selection of container, cleaning, packing and marking

This standard was first published in 1969 The Committee responsible for its preparation decided to update the standard in light of experience gained Further in this version HDPE drums have also been included as packing drums

AMENDMENT NO. 1 MARCH 2002 TO IS 5190: 1993 CODE OF PACKAGING OF NATURAL RUBBER LATEX IN DRUMS

(First Revision)

(Page 2, clause 4.2.1, Note) — Substitute the following for the existing Note

'NOTE — Raw natural rubber latex remains well preserved in presence of not less than 1 percent ammonia or 0.025 percent TMTD, 0.025 percent zunc oxide and 0.50 percent ammonia and concentrated latex with 0.70 percent ammonia or with 0.013 percent TMTD and 0.013 percent zinc oxide and 0.30 percent ammonia.

(Page 2, clause 6, line 2) — Substitute '205 ± 5' for '200'.

(PCD 14)

Reprography Unit, BIS, New Delhi, India

Indian Standard

CODE OF PACKAGING OF NATURAL RUBBER LATEX IN DRUMS

(First Revision)

1 SCOPE

This code prescribes the methods of packing and marking of natural rubber latex in clean, disinfected and painted drums.

2 REFERENCES

The following Indian Standards are necessary adjuncts to this standard:

IS No.	Title		
158: 1981	Ready mixed paint, brushing bituminous, black, lead free, acid alkali and heat resisting (third revision)		
1783 (Part 1): 1983	Drum, large, fixed ends: Part 1 Grade A drums (second revision)		
1783 (Part 2): 1988	Drums, large, fixed ends: Part 1 Grade B drums (second revision)		
3321: 1973	Formaldehyde solution (first revision)		
5430 - 1981	Ammonia preserved concentrated natural rubber latex (first revision)		
11001 . 1984	Double centrifuged natural rubber latex		
13101 . 1991	Ammonia preserved creamed natural rubber latex		

3 PACKING DRUMS

3.1 Selection of Drums

Light duty mild steel drums conforming to the sizes and dimensions given in IS 1783 (Part 1) 1983 or IS 1783 (Part 2): 1983 free from rust and other contaminations or clean high density polyethylene drums of similar capacity should be used

- 3.1.1 If the latex is to be used for the production of baby teats, surgeon's gloves, condoms, and other medical applications, it will be essential to use new drums only.
- 3.2 Painting of the drums to provide an inert lining

After thorough cleaning and drying, inside of the drums and the inside bottom surface of the bungs should be painted with two coats of an alkali resistant bituminous paint conforming to IS 158: 1981. However, painting is not necessary in the ease of HDPE drums.

- 3.2.1 In addition to the properties specified in IS 158. 1981, the paint should be resistant to ammonia preserved latex, and should be free from iron, copper and manganese.
- 3.2.2 When the paint is perfectly dry, the cut side should be welded back. Charred paint, along the weld inside the drum, should be removed with a swab, and coated afresh with the paint, sepecified in 3.2 and 3.2.1.

3.3 Disinfection

The disinfected drums should be kept with bung holes closed and opened only at the time of filling.

3.3.1 Drums which have been kept in storage for long period, should be rinsed with water, drained and disinfected just prior to filling.

NOTE — One percent solution of formalin (see IS 3321 1973) or chlorinated trisodium phosphate or 0.5 percent phenol based disinfactant (solution containing cresylic acid, orthohydroxydiphenyl and sonp as active ingredient) may be used as disinfactant

4 FILLING PROCEDURE

- 4.1 Latex may be filled into the drums by gravity from bulk storage tanks, following the procedure given in 4.1.1.
- 4.1.1 Both bung holes should be kept open. A suitable tube filled with funnel having detachable sieve (made from aluminium, polyvinyl chloride and polyethylene, etc.) be placed through the larger bung holes so as to reach the bottom of the drum to prevent frothing of latex inside, while filling
- 4.2 The drums should be filled to the desired net weight leaving an air space of 25 to 40 mm. Then both bung holes should be tightly closed and scaled
- 4.2.1 A suitable preservative should be added to the latex and well mixed before filling the drums.

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NOTE — Latex remains well preserved in the presence of 0.7 percent ammonia or 0.3 percent ammonia and 0.025 percent each of zinc oxide and Tetramethyl Thiouram Disulphide on mass of latex

5 PAINTING OUTSIDE

In the case of mild steel, drums should be painted outside for protection against weathering action.

6 PACKING CAPACITY

The material shall be packed in drums so as to contain 200 litres minimum of latex.

7 MARKING

7.1 The drum shall be marked with the following

information.

- a) Name of the material;
- b) Indication of the source of manufacture;
- c) Type of latex, that is, whether centrifuged or creamed; whether low, medium or high ammonia (see IS 5430:1981 IS 11001:1984 and IS 13101:1991);
- d) Net, and gross mass in kg, and volume in litres,
- e) Dry rubber content (DRC), and
- f) Date of packing.

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Amendments Issued Since Publication

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BUREAU OF INDIAN STANDARDS

Headquarters: Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002 Telephones: 331 01 31, 331 13 75	Telegrams: Manaksanstha (Common to all Offices)
Regional Offices:	Telephone
Central: Manak Bhavan, 9 Bahadur Shah Zafar Marg NEW DELHI 110002	{331 01 31 331 13 75
Eastern: 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola CALCUTTA 700054	{37 84 99, 37 85 61 37 86 26, 37 86 62
Northern: SCO 445-446, Sector 35-C, CHANDIGARH 160036	{53 38 43, 53 16 40 53 23 84
Southern: C. I. T. Campus, IV Cross Road, MADRAS 600113	{235 02 16, 235 04 42 235 15 19, 235 23 15
Western: Manakalaya, E9 MIDC, Marol, Andheri (East) BOMBAY 400093	\[\begin{cases} 632 & 92 & 95, & 632 & 78 & 58 \ 632 & 78 & 91, & 632 & 78 & 92 \end{cases} \]
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